SONY

3-752-746-21(1)

CD Radio Cassette-Corder

CFD-460

Operating Instructions

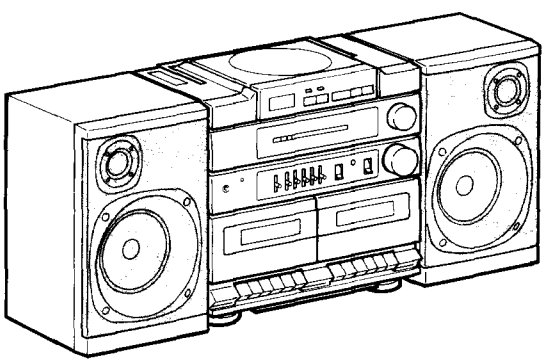
Before operating the unit, please read this manual thoroughly and retain it for future reference.

Owner's Record

The model and serial numbers are located at the rear. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. CFD-460 Serial No. _____

COMPACT disc DIGITAL AUDIO



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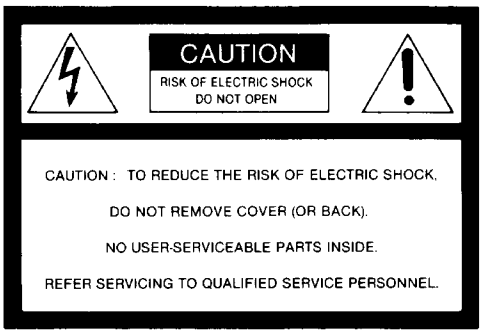
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

The use of optical instruments with this product will increase eye hazard.

Information for the customers in the U.S.A.

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna
Relocate the equipment with respect to the receiver
Move the equipment away from the receiver
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

For the customers in Canada
This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

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Features

The CFD-460 is a CD radio cassette-corder equipped with a tuner, a CD player, a double deck cassette player, and a set of 2-way separate speakers.

CD player
- Capability for playing an 8 cm (3 inch) CD without the use of an adaptor.
- Intro scan function for playing the first ten seconds of all the selections.
- Repeat function for playing the entire disc or a desired selection.
- Repeat shuffle function for playing selections repeatedly in a random order.
- Program play function for playing the selections in a desired order (up to 16 selections).

Cassette deck
- Synchronized starting system for both CD recording and tape dubbing.
- High speed dubbing function for faster tape dubbing.

General
- A Bass Boost control and a 4-band graphic equalizer for adjusting the tone quality to your preference.
- Large dials for easy tuning and volume control.

Precautions

On safety
- Operate the unit only on 120V AC or 12V DC.
  For AC operation, use the supplied AC power cord; do not use any other type.
  For battery operation, use eight size D (R20) batteries.
- Unplug the unit from the wall outlet when it is not to be used for an extended period of time.
- When the internal batteries are not to be used, remove them to avoid damage caused by battery leakage and corrosion.
- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the unit, unplug the unit, and have it checked by qualified personnel before operating it any further.

On installation
- Do not leave the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the proper operation of the unit and to prolong the life of its components.
- If the unit is left in a car parked in the sun, be sure to choose a location in the car where the unit will not be subject to the direct rays of the sun.
- Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or spring-wound watches away from the unit to prevent possible damage from the magnet.

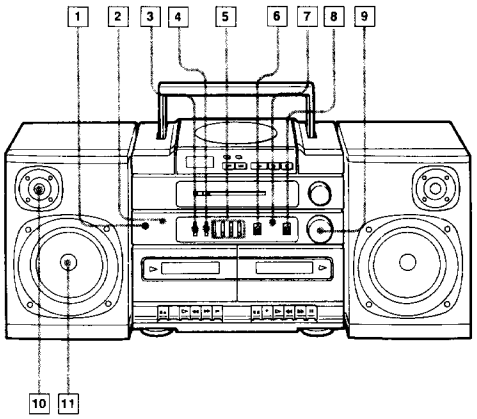
On operation
- If the unit is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the CD player section. Should this occur, the player will not operate properly. In this case, remove the disc and wait about an hour for the moisture to evaporate.
- If the unit has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a cassette.
- The use of cassettes longer than 90 minutes is not recommended except for long continuous recording or playback.

If you have any question or problem concerning your unit, please consult the nearest Sony dealer.

Parts Identification

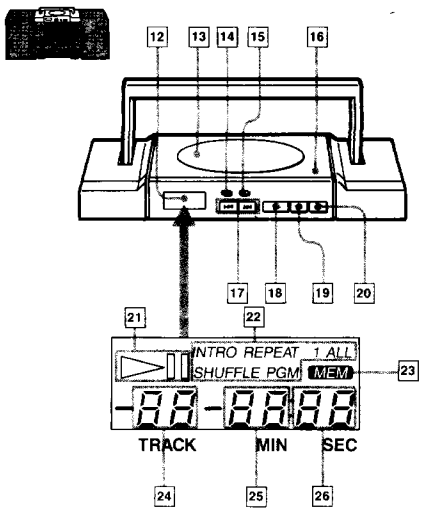
Refer to the pages indicated in ● for details.

General



1 PHONES (headphones) jack (stereo minijack)
2 OPR/BAT (operation/battery) indicator
3 BALANCE control ●
4 BASS BOOST control (for listening only) ●
5 GRAPHIC EQUALIZER controls (for listening only) ●
6 FUNCTION selector
CD: For listening to/recording CD sound.
RADIO: For listening to/recording radio programs.
DUBBING: For tape dubbing.
TAPE (CD RADIO OFF): For listening to tapes. (For turning off the CD player or the radio.)
7 FM ST (FM stereo) indicator ●
8 BAND selector
FM: For listening to/recording FM radio programs.
AM: For listening to/recording AM radio programs.
9 VOLUME control
10 Tweeter
11 Woofer

CD player section

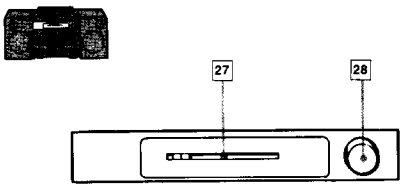


12 Display window
13 Disc cover
14 PLAY MODE button ●
INTRO: To scan all the selections
REPEAT 1: To repeat one of the selections
REPEAT ALL: To repeat all the selections
REPEAT SHUFFLE: To play the selections repeatedly in a random order.
REPEAT PGM: To play the selections repeatedly in the desired order.
PGM: To play the selections in the desired order.
15 REMAIN/ENTER button ● ●
16 PUSH OPEN/CLOSE button
17 |◄◄ ►►| AMS/SEARCH buttons ●
18 ► PLAY button
19 ❚❚ PAUSE button
20 ■ STOP button

CD display window

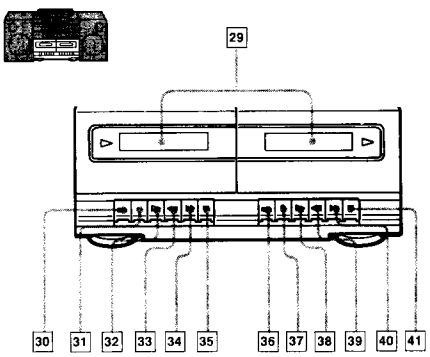
21 Pause/play indication
22 Play mode indication
23 MEM (memory) indication
24 TRACK indication
25 MIN (minute) indication
26 SEC (second) indication

Tuner section



27 Dial scale and pointer
28 TUNING control

Tape recorder section



29 Cassette holders

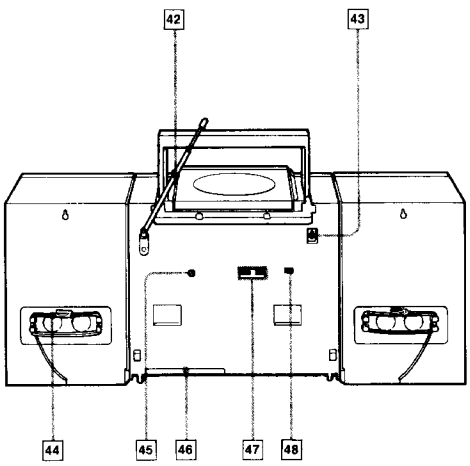
(Deck A)

30 ■⏏ (stop/eject) button
31 HI (high) SPEED DUBBING button
32 ▷ (play) button
33 ◀◀ (rewind) button
34 ▶▶ (fast forward) button
35 ❚❚ (pause) button

(Deck B)

36 ■⏏ (stop/eject) button
37 ● (record) button
38 ▷ (play) button
39 ◀◀ (rewind) button
40 ▶▶ (fast forward) button
41 ❚❚ (pause) button

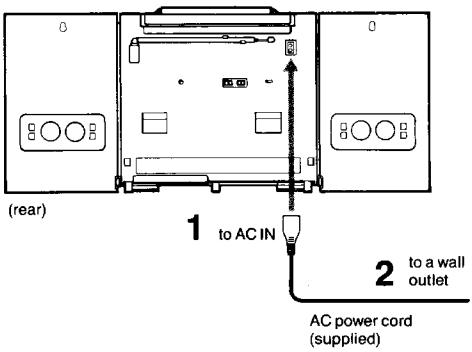
Rear panel



42 Telescopic antenna
43 AC IN (AC power input) socket ❻
44 Speaker cord ❻
45 MIX MIC (mixing microphone) jack (minijack) ❺
46 Battery compartment (bottom)
47 SPEAKER terminals
48 ISS (interference suppress switch) ❹

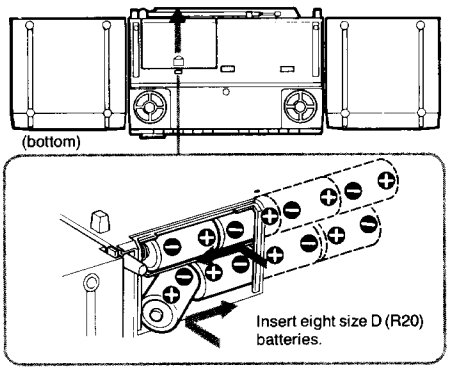
Power Sources

House Current



Note
The unit cannot be operated on the internal batteries when the AC power cord is connected to the unit.

Batteries

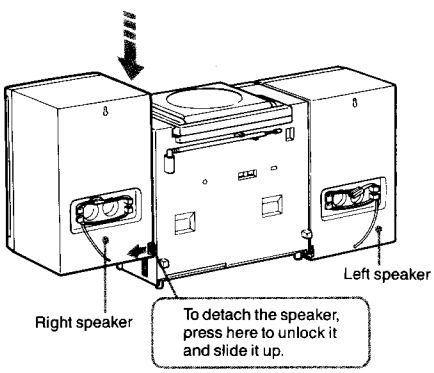


Battery replacement
The OPR/BATT indicator lights up during operation. If the batteries become weak, the indicator will glow faintly. In this case, replace all the batteries with new ones.
For information on battery life, see "Specifications" on page 14.

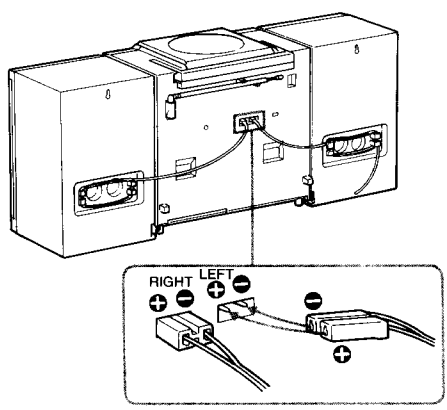
For critical recordings or disc playing
Operating the unit using the AC power cord is recommended.

Attaching and Connecting Speakers

Attaching the Speakers

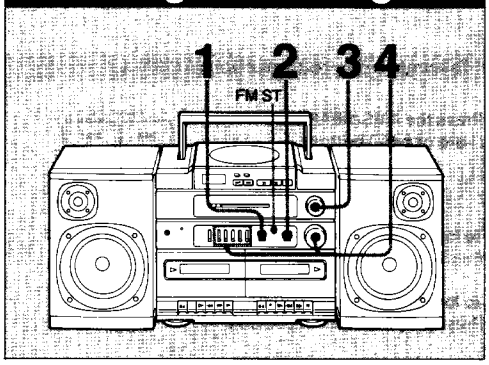


Connecting the Speakers



Notes on connection
- Turn off the power before connecting or disconnecting the speaker cords.
- Connect the speaker cord of the right speaker to the R connectors and left speaker to the L connectors.

Receiving Radio Programs



1 **Set the FUNCTION selector to RADIO.**

2 **Select the desired band, FM or AM.**

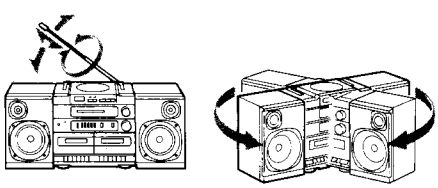
3 **Tune in the desired station with the TUNING control.**

4 **Adjust the volume with the VOLUME control.**
Adjust the tone with the BASS BOOST and the GRAPHIC EQUALIZER if necessary. (See page 10.)

To turn off the radio
Set the FUNCTION selector to TAPE (CD RADIO OFF).

To improve receiving condition

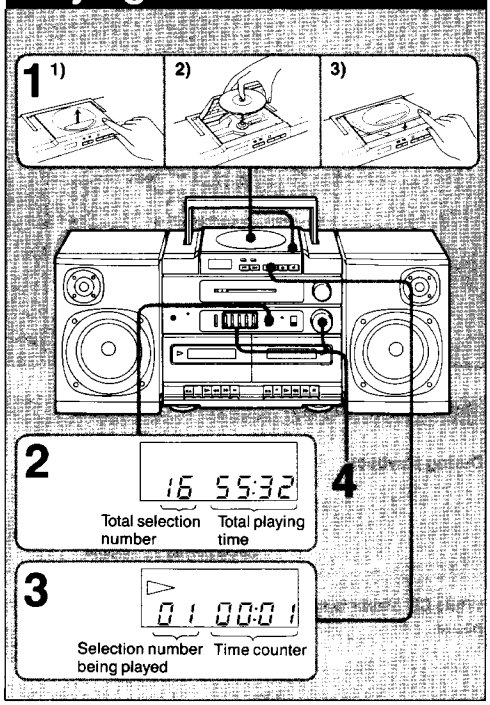
FM **AM**



When an FM stereo program is tuned in
FM ST indicator lights up.

If the received FM stereo is too weak
The reception becomes monaural, and the FM ST indicator will go off.

Playing Discs



Basic Operations

1 **Insert a disc.**
1) Open the disc cover by pressing the PUSH OPEN/ CLOSE button.
2) Place the disc in the center with the labeled surface facing upward.
3) Close the disc cover by pressing the PUSH OPEN/ CLOSE button.

2 **Set the FUNCTION selector to CD.**

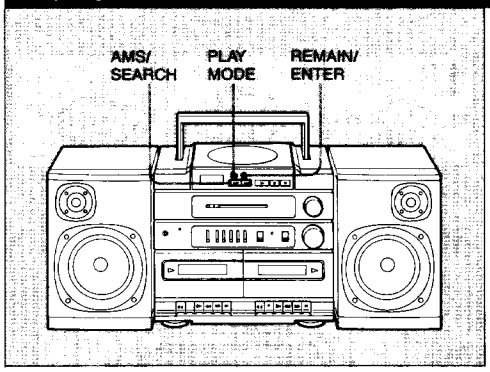
3 **Press the PLAY button.**

4 **Adjust the volume with the VOLUME control.**
Adjust the tone with the BASS BOOST and the GRAPHIC EQUALIZER if necessary. (See page 10.)

To stop play

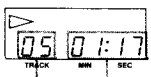
To pause	Press ❚❚.
To resume play	Press ❚❚ again.
To stop play	Press ■.
After use	Set FUNCTION to CD RADIO OFF.
To remove the disc	Press PUSH OPEN/CLOSE.

To play an 8 cm (3-inch) CD
You can play an 8 cm (3-inch) CD without using an adaptor for it.



Information display

During playback

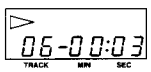


Selection number being played — Elapsed playing time

While CD player is set in pause

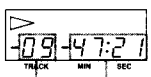
Pause indication appears.

Between selections
Remaining time for the next selection is displayed.



To display remaining time of the disc being played.
Press REMAIN/ENTER.

For normal display, press REMAIN/ENTER again.



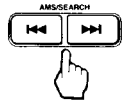
Remaining number of selections — Total remaining time of disc

Notes

- Even if REMAIN/ENTER button is pressed, remaining time of the disc being played cannot be displayed when it has more than 100 selections or its remaining time is more than 100 minutes.
- During shuffle or program play, remaining time of the disc is not displayed even if REMAIN/ENTER is pressed.

To locate a desired selection (AMS*)

Press the AMS/SEARCH (|◀◀ or ▶▶|) button.



To locate the beginning of the selection being played
Press the |◀◀ button once.

To locate a previous selection
Press the |◀◀ button repeatedly.

To locate the next selection
Press the ▶▶| button once.

To locate a selection ahead
Press the ▶▶| button repeatedly.

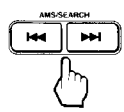
When you press |◀◀ or ▶▶| in the pause mode
The player pauses at the beginning of the located selection. Press the ❚❚ button to start playing.

When you press |◀◀ or ▶▶| in the stop mode
Playback starts from the located selection when you press the ▶ button.

*Automatic Music Sensor

To search for a particular point in a selection

Keep pressing the AMS/SEARCH (|◀◀ or ▶▶|) button during play or pause.



To review disc playing, keep pressing the |◀◀ button.
To advance disc playing, keep pressing the ▶▶| button.

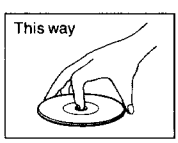
Release the button at the desired point, located by either monitoring the high-speed sound (during play) or observing the time counter.

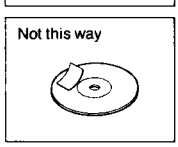
Notes on compact discs

Handle the disc by its edge, and to keep the disc clean, do not touch the surface.

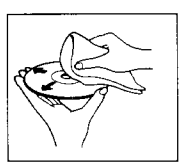
Do not stick paper or tape or write anyting on the labeled surface.

Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight where there can be a considerable rise in the temperature.





Before playing, clean the disc with a CD cleaner (not supplied). Wipe the disc from the center out.

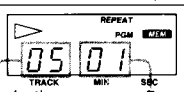
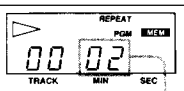
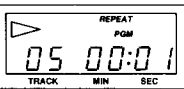
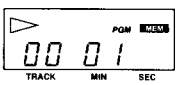


Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

After playing, store the disc in its case.

Various Disc Playing Modes

Each time PLAY MODE is pressed, play mode changes as follows. To stop the disc, press ■.
Operate while listening to the disc. However, select INTRO scan play when disc is not being played.

Play mode	Button to be pressed	Front display window
Scanning all the selections — **INTRO-scan play*** *Beginnings of selections are played for 10 seconds successively.	Press PLAY MODE once when disc is not being played.	
	Press ▶. Scanning starts from the first selection.	
Repeating one selection — **REPEAT 1**	Press PLAY MODE once more while listening to the desired selection. Press ⏮/⏭ for another selection.	
Repeating all the selections — **REPEAT ALL**	Press PLAY MODE once more. When play reaches the end of the disc, it restarts from the first selection.	
Playing in a random order — **REPEAT SHUFFLE**	Press PLAY MODE once more.	
Playing in the desired order repeatedly — **REPEAT PGM (program)**	Press PLAY MODE once more.	
	1 Choose the desired selection with ⏮ or ⏭.	
	2 Press REMAIN/ENTER. The selection is stored.	
	3 Repeat steps ❷ and ❸. (Up to 16 selections)	
	4 Press ▶. MEM disappears and play starts.	
Playing in the desired order once — **PGM (program)**	Press PLAY MODE once more. Repeat step ❷ to ❺ above.	

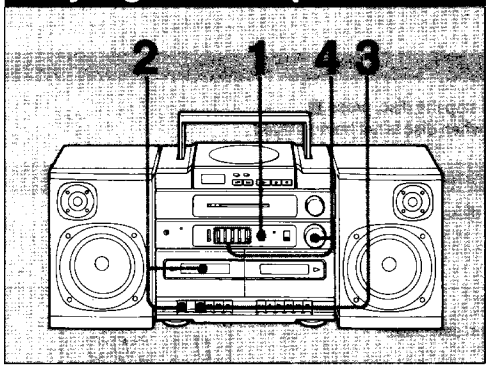
To return to normal play press PLAY MODE once more.

During REPEAT SHUFFLE play
To locate the beginning of the selection being played, press ⏮.
To locate the next selection, press ⏭.
You cannot locate a previous selection even if you keep pressing ⏮.

If another selection is stored after 16 selections have been stored.
The first selection will be cleared and the new one will be stored in its place. The program will be cleared when you press ■.

When you open the disc cover
All programmed selections are cleared.

Playing Back Tapes (Deck A or Deck B)



1 **Set the FUNCTION selector to TAPE (CD RADIO OFF).**

2 **Insert a cassette into deck A or B.**
Press the ■⏏ (stop/eject) button to open.
Note: Use only TYPE I (normal) tapes.

3 **Press the ▷ (play) button.**

4 **Adjust the volume with the VOLUME control.**
Adjust the tone with the BASS BOOST and the GRAPHIC EQUALIZER if necessary. (See page 10.)

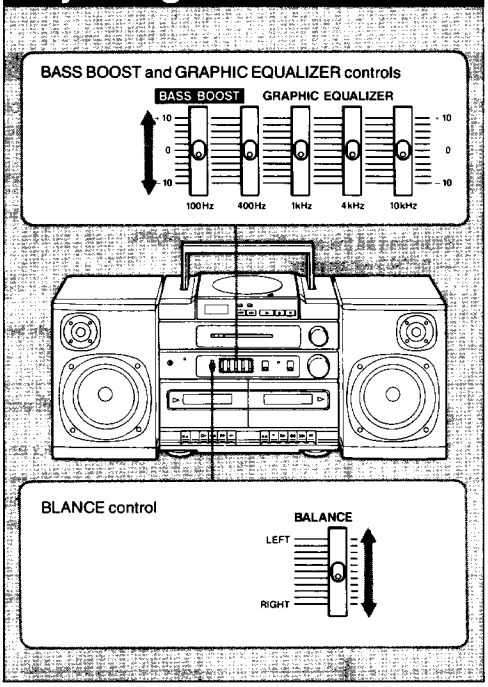
To stop play

To pause	Press ❚❚.
To resume playback	Press ❚❚ again.
To stop the tape	Press ■⏏.
To remove the tape	Press ■⏏ again.

Notes
- When both decks A and B are in the playback mode, only playback from deck B is audible.
- Do not press the ▶▶ or ◀◀ button on one deck while the other deck is playing back a tape; otherwise, the playback speed may change.

The deck shuts off automatically
When playback of the front side ends, the cassette deck shuts off automatically.

Adjusting the Sound



To Equalize the Reproduced Sound

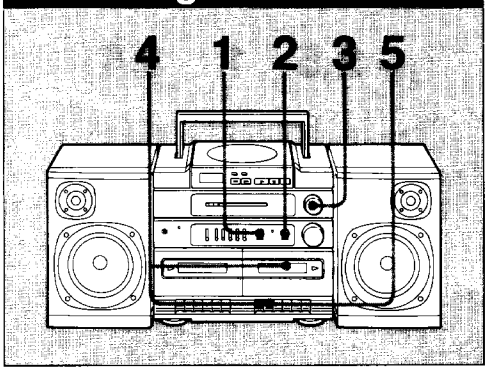
Slide the BASS BOOST and each GRAPHIC EQUALIZER control toward + 10 or – 10.
BASS BOOST (100 Hz): You can emphasize or reduce the bass sound.
GRAPHIC EQUALIZER: You can control the level of each frequency band.

Note
Set the controls to 0 (center position) when you are not using the equalizer.

To Adjust the Balance of the Left and Right Channel Output Levels

Slide the BALANCE control to LEFT or to RIGHT. You can change the relative output level of the left and right speakers. Use to adjust stereo imaging, especially when speakers are not symmetrically placed.

Recording Radio Sound



1 **Set the FUNCTION selector to RADIO.**

2 **Select the desired band, FM or AM.**

3 **Tune in the desired station with the TUNING control.**

4 **Insert a cassette into deck B.**
Press the ■⏏ (stop/eject) button to open.
Note: Use only TYPE I (normal) tapes.

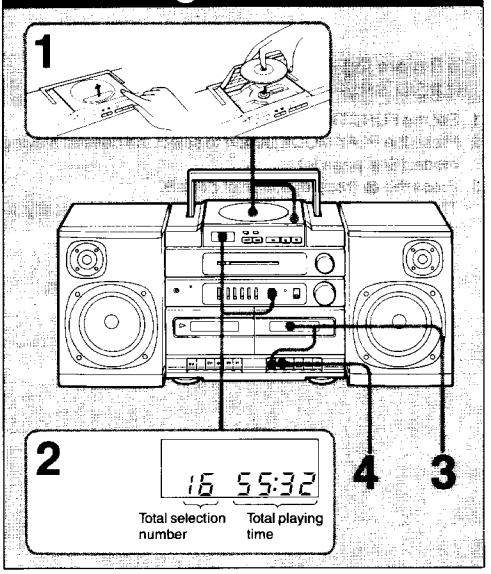
5 **Press the ● (record) button.**
The ▷ (play) button is depressed automatically, and recording starts.

To stop recording
Press the ■⏏ (stop/eject) button.
Set the FUNCTION selector to TAPE (CD RADIO OFF).

If a whistling noise is heard during recording AM programs
Set the ISS switch (on the rear) to the position which reduces the noise best.

Note
For stable recording, do not press the ▶▶, ◀◀, or ▷ button of deck A while recording.

Recording CD Sound



1 **Insert a disc. (See page 7.)**

2 **Set the FUNCTION selector to CD.**

3 **Insert a cassette into deck B.**
Notes: • Use only TYPE I (normal) tapes.
• Choose the tape referring to "total playing time" indicated on the display window.

4 **Press the ● (record) button.**
The ▷ (play) button is depressed automatically, and recording starts from the beginning of the disc after a few seconds.

To stop recording
Press STOP of the CD player and ■⏏ (stop/eject) of deck B.
Set the FUNCTION selector to TAPE (CD RADIO OFF).

Recording CD Sound

To Record INTRO, REPEAT 1/ALL, REPEAT SHUFFLE, REPEAT PGM, or PGM Play

1 Set the FUNCTION selector to CD.
2 Press the PLAY MODE button to select the desired playing mode. (See page 9.)
3 Press the ● (record) button of deck B.
The disc play begins and recording starts automatically at the same time after a few seconds.

Important

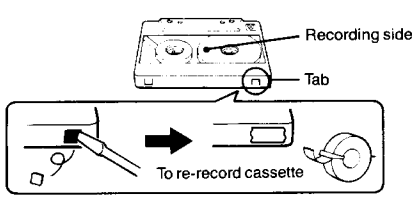
- Press the ● (record) button after confirming that "total selection number" and "total playing time" are indicated on the display window of the CD player.
- Advance the leader tape before recording to prevent missing the beginning part of the recording.
- When recording on the front side of the cassette is finished, the cassette deck shuts off automatically. The disc, however, continues to play.

Recording level

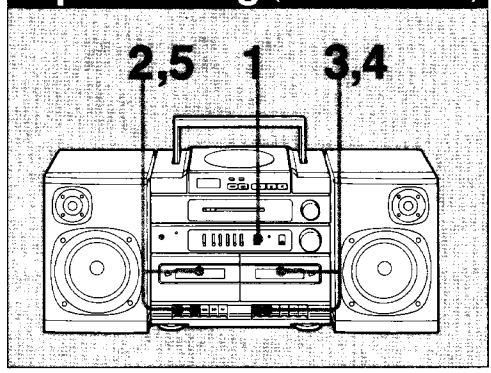
— is automatically adjusted.
— is not affected by the setting of the VOLUME, BASS BOOST, or GRAPHIC EQUALIZER controls.

To prevent accidental erasure

Break off the tab corresponding to side which has been recorded. Recording will be protected.



Tape Dubbing (Deck A to Deck B)



1 Set the FUNCTION selector to DUBBING.

2 Insert a recorded tape into deck A (PLAY).

3 Insert a blank tape into deck B (REC/PLAY).
Note: Use only TYPE I (normal) tapes.

4 Press the ● (record) button on deck B.
The ▷ (play) button is depressed automatically. The unit will stand by.

5 Press the ▷ (play) button on deck A.
Recording will start.

To stop dubbing

Press the ■⏏ (stop/eject) button on deck A and then on deck B.
Set the FUNCTION selector to TAPE (CD RADIO OFF).

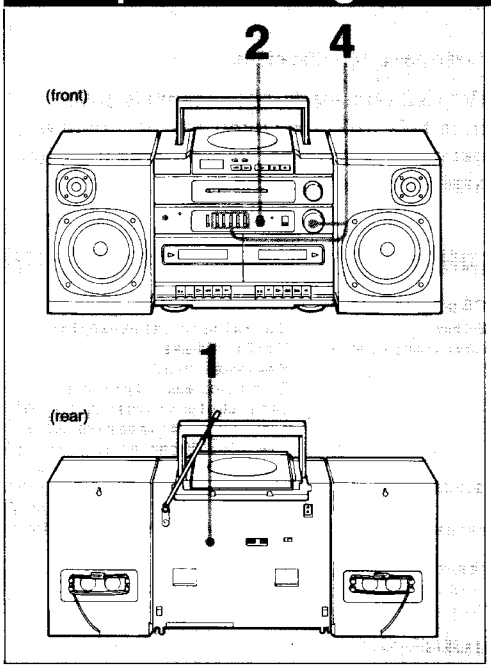
High speed dubbing

For faster dubbing, press the HI SPEED DUBBING button on deck A. The ▷ (play) button is depressed automatically.

Notes on dubbing

- If deck A's tape finishes first, deck B will also stop.
- If deck B's tape finishes first, deck A will continue to play.

Microphone Mixing



Use a monaural microphone equipped with a miniplug (not supplied).

1 **Plug the microphone into the MIX MIC jack. If the microphone has a switch, set it to on.**

2 **Choose the desired sound source with the FUNCTION selector, CD, RADIO, or TAPE.**

3 **Play the sound source and speak or sing into the microphone.**

4 **Adjust the volume with the VOLUME control.**

To record the mixed sound

1 Insert a cassette into deck B.
2 Press the ● (record) button.
3 Play the sound source (CD, tape, or radio) and speak or sing into the microphone.

You can record the sound mixed with a CD, a tape, or a radio program. You cannot mix the sound during high speed dubbing.

Recording microphone sound (monaural)

1 Set the FUNCTION selector to TAPE.
2 Insert a cassette in deck B.
3 Press the ● (record) button.
4 Speak or sing into the microphone.

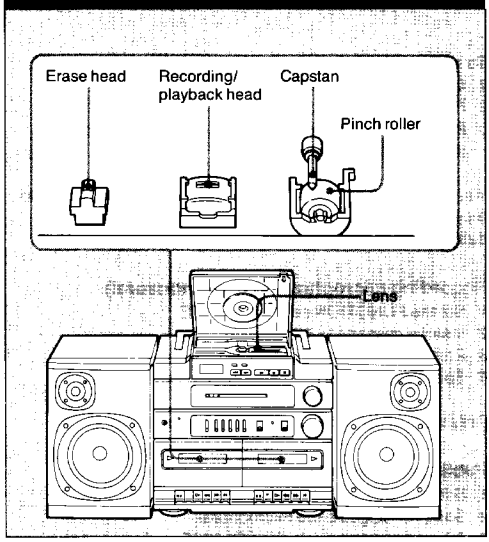
Only the sound from the microphone is recorded.

Public address system

1 Set the FUNCTION selector to CD.
2 Speak or sing into the microphone.
3 Adjust the volume with the VOLUME control.

If howling (acoustic feedback) occurs
Move the microphone away from the speakers.
It is not recommended to use a microphone equipped with echo function.

Maintenance



Cleaning the heads and tape path
We recommend cleaning after every 10 hours of operation. To make the best possible recordings, however, you should clean all surfaces over which the tape travels before making each recording.

Wipe the heads, the pinch roller and the capstan with a cleaning tip slightly moistened with cleaning fluid or alcohol.

After cleaning the heads and tape path, insert a cassette when the areas cleaned are completely dry.

Demagnetizing heads
After 20 to 30 hours of use, enough residual magnetism will have built up on the heads to begin to cause loss of high frequencies and hiss. At this time you should demagnetize the heads and all metal parts in the tape path with a commercially available head demagnetizer. Be sure that the cassette-corder is turned off while you demagnetize.

Cleaning the lens
If you have accidentally touched the lens of the CD player section with dirty fingers or the dust has accumulated on the lens, the unit will not operate properly. In such cases clean the lens with lens cleaning kit (not supplied).

Cleaning the cabinet
Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

Specifications

Audio power specifications

With 3.2-ohm loads, both channels driven from 150–10,000 Hz: rated 4 W, per channel minimum RMS power, with no more than 10% total harmonic distortion in AC operation.

Other specifications

CD player section

System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wavelength: 780 nm Emission duration: Continuous Laser output power: less than 44.6 μW* *This output is the value measured at a distance of 200 mm from the objective lens surface on the optical pick-up block.
Spindle speed	12 cm CD: Approx. 200 to 500 r.p.m. (CLV) 8 cm CD: Approx. 300 to 500 r.p.m. (CLV)
Error correction	Sony Super Strategy Cross Interleave Reed Solomon Code
Number of channels	2
Frequency response	20–20,000 Hz: $\pm\frac{1}{2}$ dB
Wow and flutter	Below measurable limit

Radio section

Frequency range	FM: 87.6–108 MHz AM: 530–1,710 kHz
Antennas	FM: Telescopic antenna AM: Built-in ferrite bar antenna

Tape recorder section and general

Recording system	4-track 2-channel stereo
Fast winding time	Approx. 2 min. with Sony cassette C60
Frequency response	With TYPE I (NORMAL) cassette: 80–10,000 Hz
Speakers	Woofer: 12 cm dia., cone type Tweeter: 2 cm dia.
Power output	Model for Canada: 4.3 W + 4.3 W (at 3.2 ohms, 315 Hz, 10% harmonic distortion)
Inputs	External microphone input jack (minijack) Sensitivity 0.78 mV For low impedance microphone
Outputs	Headphones jack (stereo minijack) For 16–68 ohms impedance headphones
Power requirements	120V AC, 60 Hz DC 12V, 8 size D (R20) batteries
Power consumption	AC 21W (for USA model) AC 27W (for Canada model)

Battery life

Batteries	Sony SUM-1 (NS)	Sony Alkaline AM1
FM recording	Approx. 15 hrs	Approx. 35 hrs
Disc playing	Approx. 6 hrs	Approx. 16 hrs

Dimensions	677 × 292 × 194 mm (w/h/d) (26¾ × 11½ × 7¾ inches) incl. projecting parts and controls
Weight	7.7 kg (16 lb 15 oz) incl. batteries
Accessory supplied	AC power cord (1)

Design and specifications subject to change without notice.

Accessories not supplied

Stereo headphones Sony MDR Headphone Series
Head demagnetizer HE-5C
Head cleaning kit KK-4, KK-31
CD lens cleaning kit KK-9
CD disc cleaner XP-CD1, XP-CD3
Microphone Sony Dynamic Microphone Series

Troubleshooting Guide

The unit does not operate.	• The AC power cord is not connected (for AC operation). • Incorrect polarity of batteries (See page 6.) • Weak batteries (See page 6.)
No audio	• Slide the VOLUME control toward MAX. • Check the FUNCTION selector setting. • The headphones are plugged in.
No audio from one channel or unbalanced left and right volume	• Adjust the BALANCE control (See page 10.)

CD Player Operation	
Disc play does not begin.	• Insert the disc with the labeled surface facing upward. • Dusty or defective disc (See page 8.) • Dirty or dusty lens (See page 14.) • The disc compartment lid is not closed. • Moisture condensation (See page 3.) • When the CD operation buttons cannot be activated, turn off the unit and begin again. • Improper setting of the FUNCTION selector
Skipping of sound	• Dusty or defective disc (See page 8.) • Dirty lens (See page 14.) • Strong vibrations

Cassette-Corder Operation	
Tape does not move.	• The cassette is being inserted improperly. • The tape is slack. • The cassette compartment lid is not closed.
The ● (record) button cannot be activated.	• No cassette in deck B. • The tab is removed from the cassette. (See page 12.)
Recording or playback cannot be made or there is a decrease in sound level.	• Dirty heads (See page 14.) • Improper setting of the FUNCTION selector
Unsatisfactory erasing	• Dirty erase head (See page 14.)
Excessive wow or flutter, or sound drop-out	• Contamination of the capstan or pinch roller (See page 14.) • Magnetic contamination of the head (See page 14.) • Weak batteries (See page 6.)

Sony Corporation Printed in Korea